

### **REMARKS**

Reconsideration of the present application is requested.

Responsive to the Examiner's objection, the passage in the specification at page 23 line 7-19 has been deleted.

The clarity objection raised in the Office Action that the embodiments shown in Figures 4-9b are not covered by the claims should no longer be maintained, as the amended claims include within their scope these embodiments.

Responsive to the Examiner's indefiniteness objection to original claims 11 and 12 due to lack of antecedent basis for the "said main plastic housing", new claims 24 and 25 refer to "said main housing".

### **Lack of Inventive Step**

The Examiner has raised an inventive step objection to previously presented claims 1-12 in view of a combination of US 6,627,852 to Savone (Savone) and US 1,014,952 to Cox (D2). The Examiner stated that Savone failed to teach the feature of a styling member having a main housing on which the styling member is rotatably supported; and stated that this feature was taught in Cox.

In view of the proposed amendments and submissions, it is respectfully submitted that the inventive step objection should no longer be maintained.

### **Present Invention**

The presently claimed invention provides a hair styling apparatus including detachable styling members each with a rotatable styling head.

The styling apparatus and attachment of the present invention includes a styling member with a built in heater, and styling rollers which are rotatable relative

to each other upon contact styling of hair. An electrical adaptor interfaces with the styling roller to form therewith a cooperative rotary electrical interfacing connector to supply operating power for the heater during the contact styling.

As stated in the present specification at page 2 lines 1-8, a hair styling apparatus with a rotatable styling head that rotates during the contact styling, reduces stress and strain on hair during styling contact due to the smoother relative movements between hair tresses being styled and the rotatable styling head. Furthermore, the arrangement of the present invention provides for heat on the circumference of the styling head to be utilized more efficiently and applied more evenly to the hair tresses than with prior art devices.

#### **US 6,627,852 To Savone**

Savone teaches a hair iron which can be used in both straightening and curling modes of operation. The hair iron of Savone addresses the problem noted in Savone of two separate irons being required, one iron for curling and one iron for straightening hair.

The hair iron of Savone provides a pair of heating tips which are re-configurable to change the shape and contour of the hair contact surface defined collectively by the heating tips (see e.g. Figures 2 and 3). As such, the heating tips of the Savone irons "have non-symmetrical cross-sectional shapes with respect to their lengthwise axes" (lines 12-14, column 4).

In particular, the hair iron of Savone is reconfigurable between (1) a curling iron, and (2) a hair straightener "by rotating the heating tips about axes along the handle length to orient the heating tip cross-sectional shapes with respect to each

other so that various heating tip contact surface are selected” (lines 39-49, column 2).

Importantly, and in contrast to the presently claimed invention, the contact surface of the hair iron of Savone, will, once selected, remain in the selected orientation during the contact styling operation when the heating tips are in contact with the hair tresses. The contact surface defined by the styling apparatus is thus configured by the user for the desired styling operation (straighten or curl). Once configured, hair styling on the portion of hair which is compressed between the heating tips is performed.

As taught in Savone, the styling technique is performed by firmly pressing a portion of hair tresses between the first heating tip and second heating tip (see lines 1-11, column 6), releasing the pressure, moving the hair tresses relative to the iron and pressing the tips on a different portion of hair tress.

As the Savone styling device is non-rotatable during the hair styling contact, only heat present on the hair contact portions of the heating tips is applied to hair under contact. This means that heat distributed on the remaining periphery of the heating tips will not be used efficiently. Additionally, the non-rotation of the Savone heating tips during styling contact, together with the need to press the hair in contact with the heating tips in the closed styling position (see lines 1-2, column 6), necessarily means that hair will be firmly engaged by the pair of heating tips. If at this time an attempt is made to draw the Savone hair iron along a length of hair towards its free end are likely to damage the hair and/or scalp.

Therefore, the heating tips of the Savone device are capable of only limited rotation to select a combination of hair contact surfaces prior to the contact styling

operation. Savone does not teach that the hair curling tips are rotatable once the orientation has been selected. If the hair curling tips of Savone were in fact rotatable, the Savone hair curling device would not satisfy the problem identified in that specification.

Furthermore, the specifically non-symmetrical cross-section of all heating tips of Savone teaches the opposite direction to the present invention as defined by Claim 13 of the present invention in which the styling rollers rotate relative to each other during use.

As such, the inclusion of the feature of styling members which have styling rollers and heating members where the styling rollers are arranged to rotate relative to each other during contact styling of hair, a feature not taught or suggested in the prior art renders the presently claimed invention novel and inventive in view of Savone.

Accordingly, the Savone device does not confer benefits which are provided by a hair styling apparatus of the present invention as defined in Claims 13 and 21 and described on page 2, lines 1-8 of the present application. Furthermore, there is no identification of the problem addressed by the present invention, or any hint or suggestion of how it may be resolved in Savone.

**US 1,014,952 To Cox**

Cox teaches a hair straightener comprising a pair of hair rollers which require pre-heating (from an external source) prior to use in styling.

As a substantial portion of the periphery of the rollers is enclosed within an enclosure (1), heating of the rollers will be localized and inefficient compared to the

present invention by any suitable source of heat which is applied to the rollers when mating parts 1 and 2 have been opened. (Page 2, Column 2 lines 30-35).

Alternatively, in the device of Cox if the rollers are removed for heating prior to use (as suggested at lines 80-85 of page 2, column 2) this would be extremely inconvenient and impractical to a user, since fasteners (11) at both longitudinal ends of the rollers need to be loosened to remove the rollers and then the heated rollers then need to be re-fastened before use. Of course, as is known to a person skilled in the art, some tool for transporting the heated rollers for re-installation is required, which makes the Cox device extremely inconvenient in operation.

There is no disclosure in Cox of a styling member having a built in heater, or an electrical adaptor and styling roller which interface to provide operating power for the heater.

Accordingly, the Cox device does not confer benefits which are provided by a hair styling apparatus of the present invention as defined in Claims 13 and 21. Furthermore, there is no identification of the problem addressed by the presently claimed invention, or any hint or suggestion of how it may be resolved in Cox.

#### **Combination of Savone and Cox**

Savone teaches a hair styling iron configurable between curling and straightening operations which is essentially non- rotatable during a contact styling operation.

As such, Savone teaches a styling iron very different from that of the presently claimed invention, the Savone styling iron being directed towards solving an entirely different problem, in a very different context to that of the present invention.

Cox teaches a hair straightener which relies upon external pre-heating of the rollers. As such, Cox does not contemplate or suggest the inclusion of a built in heater in a styling member, let alone electrical heaters.

There is no contemplation in either of Cox or Savone of the combination of features recited in each of claims 13 and 21, including styling members having built in heaters and which are rotatable during a contact styling operation while being supplied with electric power.

Accordingly, it is submitted that there is no obvious combination of Savone and Cox which would result in the presently claimed invention.

Note also that dependent claims 24 and 26 recite that the hair styling surface is substantially symmetrical about the longitudinal axis of the styling roller, a feature which is incompatible with the apparatus of Savone (see Savone, col. 4, lines 32-35).

Dependent claim 27 defines the rotary electrical interfacing connector as comprising circular rotary contacts on an outer surface of the styling roller (e.g., see preferred contacts 340) and stationary contacts of the adaptor arranged to engage the rotary contacts (e.g., see the preferred contacts 390). Neither of the devices of Savone and Cox disclose or teach a rotary electrical interfacing connector, let alone the connector structure defined by claim 27.

Should any questions arise in connection with this application, or should the Examiner believe that a telephone conference with the undersigned would be helpful

in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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